

DELCO 2000 MSDS





## Material Safety Data Sheets

### Division of Facilities Services

## DOD Hazardous Material Information (ANSI Format) For Cornell University Convenience Only

### ALL MODELS OF DELCO BATTERIES

<a href="#">Section 1 - Product and Company Identification</a>	<a href="#">Section 9 - Physical &amp; Chemical Properties</a>
<a href="#">Section 2 - Composition/Information on Ingredients</a>	<a href="#">Section 10 - Stability &amp; Reactivity Data</a>
<a href="#">Section 3 - Hazards Identification Including Emergency Overview</a>	<a href="#">Section 11 - Toxicological Information</a>
<a href="#">Section 4 - First Aid Measures</a>	<a href="#">Section 12 - Ecological Information</a>
<a href="#">Section 5 - Fire Fighting Measures</a>	<a href="#">Section 13 - Disposal Considerations</a>
<a href="#">Section 6 - Accidental Release Measures</a>	<a href="#">Section 14 - MSDS Transport Information</a>
<a href="#">Section 7 - Handling and Storage</a>	<a href="#">Section 15 - Regulatory Information</a>
<a href="#">Section 8 - Exposure Controls &amp; Personal Protection</a>	<a href="#">Section 16 - Other Information</a>

The information in this document is compiled from information maintained by the United States Department of Defense (DOD). Anyone using this information is solely responsible for the accuracy and applicability of this information to a particular use or situation.

Cornell University does not in any way warrant or imply the applicability, viability or use of this information to any person or for use in any situation.

### Section 1 - Product and Company Identification ALL MODELS OF DELCO BATTERIES

**Product Identification:** ALL MODELS OF DELCO BATTERIES

**Date of MSDS:** 06/04/1994 **Technical Review Date:** 08/28/1997

**FSC:** 6140 **NIIN:** 01-355-2013

**Submitter:** N EN

**Status Code:** C

**MFN:** 02

**Article:** N

**Kit Part:** N

### **Manufacturer's Information**

**Manufacturer's Name:** DELCO REMY DIV GMC  
**Manufacturer's Address1:** 2401 COLUMBUS AVE  
**Manufacturer's Address2:** ANDERSON, IN 46018  
**Manufacturer's Country:** US  
**General Information Telephone:** 317-646-7800  
**Emergency Telephone:** 317-646-7800  
**Emergency Telephone:** 317-646-7800  
**MSDS Preparer's Name:** EDWARD M. ESENIAC  
**Proprietary:** N  
**Reviewed:** N  
**Published:** Y  
**CAGE:** NO488  
**Special Project Code:** N

### **Item Description**

**Item Name:** BATTERY,STORAGE  
**Item Manager:**  
**Specification Number:** NK  
**Type/Grade/Class:** NK  
**Unit of Issue:**  
**Unit of Issue Quantity:**  
**Type of Container:**

### **Contractor Information**

**Contractor's Name:** DELCO REMY DIVISION GMC  
**Contractor's Address1:** 2401 COLUMBUS AVE  
**Contractor's Address2:** ANDERSON, IN 46018  
**Contractor's Telephone:** 317-646-7800  
**Contractor's CAGE:** NO488

### **Contractor Information**

**Contractor's Name:** GENERAL MOTORS CORP, DELCO REMY DIV  
**Post Office Box:** 640  
**Contractor's Address1:** 2401 COLUMBUS AVE  
**Contractor's Address2:** ANDERSON, IN 48011  
**Contractor's Telephone:** EMER:313/556-1597 OR 6200  
**Contractor's CAGE:** 16764

---

**Section 2 - Composition/Information on Ingredients**  
**ALL MODELS OF DELCO BATTERIES**

---

**Ingredient Name:** LEAD (SARA 313) (CERCLA)  
**Ingredient CAS Number:** 7439-92-1 **Ingredient CAS Code:** M  
**RTECS Number:** OF7525000 **RTECS Code:** M  
**=WT: =WT Code:**  
**=Volume: =Volume Code:**  
**>WT: >WT Code:**  
**>Volume: >Volume Code:**  
**<WT: <WT Code:**  
**<Volume: <Volume Code:**  
**% Low WT: % Low WT Code:**  
**% High WT: % High WT Code:**  
**% Low Volume: % Low Volume Code:**  
**% High Volume: % High Volume Code:**  
**% Text:** >80  
**% Environmental Weight:**  
**Other REC Limits:** N/K  
**OSHA PEL:** SEE 1910.1025 **OSHA PEL Code:** M  
**OSHA STEL:** **OSHA STEL Code:**  
**ACGIH TLV:** 0.15 MG/M3 DUST **ACGIH TLV Code:** M  
**ACGIH STEL:** N/P **ACGIH STEL Code:**  
**EPA Reporting Quantity:** 1 LB  
**DOT Reporting Quantity:** 1 LB  
**Ozone Depleting Chemical:** N

**Ingredient Name:** POLYETHYLENE; (SEPARATOR)  
**Ingredient CAS Number:** **Ingredient CAS Code:** X  
**RTECS Number:** **RTECS Code:** X  
**=WT: =WT Code:**  
**=Volume: =Volume Code:**  
**>WT: >WT Code:**  
**>Volume: >Volume Code:**  
**<WT: <WT Code:**  
**<Volume: <Volume Code:**  
**% Low WT: % Low WT Code:**  
**% High WT: % High WT Code:**  
**% Low Volume: % Low Volume Code:**  
**% High Volume: % High Volume Code:**  
**% Text:** N/K  
**% Environmental Weight:**  
**Other REC Limits:** N/K  
**OSHA PEL:** N/K (FP N) **OSHA PEL Code:** M  
**OSHA STEL:** **OSHA STEL Code:**  
**ACGIH TLV:** N/K (FP N) **ACGIH TLV Code:** M  
**ACGIH STEL:** N/P **ACGIH STEL Code:**  
**EPA Reporting Quantity:**  
**DOT Reporting Quantity:**  
**Ozone Depleting Chemical:**

**Ingredient Name:** POLYPROPYLENE (PLASTIC); (CASE AND COVER)  
**Ingredient CAS Number:** **Ingredient CAS Code:** X  
**RTECS Number:** RTECS Code: X  
**=WT:** =WT Code:  
**=Volume:** =Volume Code:  
**>WT:** >WT Code:  
**>Volume:** >Volume Code:  
**<WT:** <WT Code:  
**<Volume:** <Volume Code:  
**% Low WT:** % Low WT Code:  
**% High WT:** % High WT Code:  
**% Low Volume:** % Low Volume Code:  
**% High Volume:** % High Volume Code:  
**% Text:** N/K  
**% Enviromental Weight:**  
**Other REC Limits:** N/K  
**OSHA PEL:** N/K (FP N) **OSHA PEL Code:** M  
**OSHA STEL:** OSHA STEL Code:  
**ACGIH TLV:** N/K (FP N) **ACGIH TLV Code:** M  
**ACGIH STEL:** N/P **ACGIH STEL Code:**  
**EPA Reporting Quantity:**  
**DOT Reporting Quantity:**  
**Ozone Depleting Chemical:**

**Ingredient Name:** SULFURIC ACID (SARA 302/313) (CERCLA)  
**Ingredient CAS Number:** 7664-93-9 **Ingredient CAS Code:** M  
**RTECS Number:** WS5600000 **RTECS Code:** M  
**=WT:** =WT Code:  
**=Volume:** =Volume Code:  
**>WT:** >WT Code:  
**>Volume:** >Volume Code:  
**<WT:** <WT Code:  
**<Volume:** <Volume Code:  
**% Low WT:** % Low WT Code:  
**% High WT:** % High WT Code:  
**% Low Volume:** % Low Volume Code:  
**% High Volume:** % High Volume Code:  
**% Text:** 37  
**% Enviromental Weight:**  
**Other REC Limits:** N/K  
**OSHA PEL:** 1 MG/M3 **OSHA PEL Code:** M  
**OSHA STEL:** OSHA STEL Code:  
**ACGIH TLV:** 1 MG/M3;3 STEL **ACGIH TLV Code:** M  
**ACGIH STEL:** N/P **ACGIH STEL Code:**  
**EPA Reporting Quantity:** 1000 LBS  
**DOT Reporting Quantity:** 1000 LBS  
**Ozone Depleting Chemical:** N

**Ingredient Name:** VOLATILE ORGANIC COMPOUNDS (THEORETICAL): 9 LBS/GAL (AS PACKAGED MINUS WATER).

**Ingredient CAS Number:** **Ingredient CAS Code:** X

**RTECS Number:** 9999999VO **RTECS Code:** M

**=WT:** **=WT Code:**

**=Volume:** **=Volume Code:**

**>WT:** **>WT Code:**

**>Volume:** **>Volume Code:**

**<WT:** **<WT Code:**

**<Volume:** **<Volume Code:**

**% Low WT:** **% Low WT Code:**

**% High WT:** **% High WT Code:**

**% Low Volume:** **% Low Volume Code:**

**% High Volume:** **% High Volume Code:**

**% Text:** N/K

**% Enviromental Weight:**

**Other REC Limits:** N/K

**OSHA PEL:** NOT APPLICABLE **OSHA PEL Code:** M

**OSHA STEL:** **OSHA STEL Code:**

**ACGIH TLV:** NOT APPLICABLE **ACGIH TLV Code:** M

**ACGIH STEL:** N/P **ACGIH STEL Code:**

**EPA Reporting Quantity:**

**DOT Reporting Quantity:**

**Ozone Depleting Chemical:**

**Ingredient Name:** WATER

**Ingredient CAS Number:** 7732-18-5 **Ingredient CAS Code:** M

**RTECS Number:** ZC0110000 **RTECS Code:** M

**=WT:** **=WT Code:**

**=Volume:** **=Volume Code:**

**>WT:** **>WT Code:**

**>Volume:** **>Volume Code:**

**<WT:** **<WT Code:**

**<Volume:** **<Volume Code:**

**% Low WT:** **% Low WT Code:**

**% High WT:** **% High WT Code:**

**% Low Volume:** **% Low Volume Code:**

**% High Volume:** **% High Volume Code:**

**% Text:** BALANCE

**% Enviromental Weight:**

**Other REC Limits:** N/K

**OSHA PEL:** N/K (FP N) **OSHA PEL Code:** M

**OSHA STEL:** **OSHA STEL Code:**

**ACGIH TLV:** N/K (FP N) **ACGIH TLV Code:** M

**ACGIH STEL:** N/P **ACGIH STEL Code:**

**EPA Reporting Quantity:**

**DOT Reporting Quantity:**

**Ozone Depleting Chemical:** N

---

### Section 3 - Hazards Identification, Including Emergency Overview

#### ALL MODELS OF DELCO BATTERIES

---

**Health Hazards Acute & Chronic:** CONTACT W/SULFURIC ACID IS HARMFUL TO BODY TISSUE (BURNS). NOTE:LEAD APPEARS ON NAVY LISTING OF OCCUPATIONAL CHEMICAL REPRODUCTIVE HAZARDS. SEEK CONSULTATION FROM APPROPRIATE HEALTH PROFESSIONALS CONCERNING LATEST HAZARD LIST INFORMATION &SAFE HANDLING & EXPOSURE INFORMATION (FP N).

**Signs & Symptoms of Overexposure:**  
SEE HEALTH HAZARDS.

**Medical Conditions Aggravated by Exposure:**  
NONE SPECIFIED BY MANUFACTURER.

**LD50 LC50 Mixture:** NONE SPECIFIED BY MANUFACTURER.

**Route of Entry Indicators:**

**Inhalation:** YES

**Skin:** YES

**Ingestion:** YES

**Carcenogenicity Indicators**

**NTP:** NO

**IARC:** YES

**OSHA:** NO

**Carcinogenicity Explanation:** SULFURIC ACID:IARC MONOGRAPHS, VOL 54, PG 41, 1992:GROUP 1. ANIMAL:PULMONARY IRRITATION.

---

### Section 4 - First Aid Measures

#### ALL MODELS OF DELCO BATTERIES

---

**First Aid:**

EYES:IMMEDIATELY FLUSH W/POTABLE WATER FOR A MINIMUM OF 15 MINUTES, SEEK ASSISTANCE FROM MD (FP N). SKIN:FLUSH W/COPIOUS AMOUNTS OF WATER. CALL MD (FP N). INHAL:REMOVE TO FRESH AIR. GET MEDICAL ATTENTION. INGEST:DO NOT INDUCE VOMITING. GIVE MILK MIXED W/EGG WHITES, IF CONSCIOUS.

---

### Section 5 - Fire Fighting Measures

#### ALL MODELS OF DELCO BATTERIES

---

**Fire Fighting Procedures:**

USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT (FP N). TOXIC FUMES FROM BURNING PLASTIC, ACID FUMES & VAPORS CAN OCCUR.

**Unusual Fire or Explosion Hazard:**

WHILE BATTERIES ARE BEING CHARGED, HYDROGEN GAS IS GENERATED. AVOID OPEN FLAME, SPARKS OR LIGHTED MATCHES. ACID, AN OXIDIZER, CAN IGNITE COMBUSTS UPON CONTACT.

**Extinguishing Media:**

MEDIA SUITABLE FOR SURROUNDING FIRE (FP N).

**Flash Point:** **Flash Point Text:** NOT APPLICABLE

**Autoignition Temperature:**

**Autoignition Temperature Text:** N/A

**Lower Limit(s):** N/A

**Upper Limit(s):** N/A

---

**Section 6 - Accidental Release Measures**  
**ALL MODELS OF DELCO BATTERIES**

---

**Spill Release Procedures:**

NEUTRALIZE &/OR FLUSH W/LARGE VOLUMES OF WATER. CONTAIN SPILL. CERCLA REPORTABLE QUANTITY:1,000 LBS.

---

**Section 7 - Handling and Storage**  
**ALL MODELS OF DELCO BATTERIES**

---

**Handling and Storage Precautions:**

**Other Precautions:**

---

**Section 8 - Exposure Controls & Personal Protection**  
**ALL MODELS OF DELCO BATTERIES**

---

**Respiratory Protection:**

USE NIOSH APPROVED RESPIRATORY PROTECTION IF 1 MG/M3 IS EXCEEDED (ACID).

**Ventilation:**

LOCAL EXHAUST:YES AS CHARGING STATIONS.

**Protective Gloves:**

RUBBER GLOVES.

**Eye Protection:** ANSI APPROVED CHEM WORKERS GOGGS(SUPDAT)

**Other Protective Equipment:** ANSI APPROVED EYE WASH FOUNTAIN & DELUGE SHOWER (FP N).

USE RUBBER BOOTS & ACID-PROOF CLOTHING FOR MAJOR SPILLS.

**Work Hygienic Practices:** NONE SPECIFIED BY MANUFACTURER.

**Supplemental Health & Safety Information:** SPEC GRAV:AVERAGE 1.28 +/- 0.01 (VARIES W/BATTERY SIZE). EYE PROT:& FULL LENGTH FACESHIELD (FP N).

---

**Section 9 - Physical & Chemical Properties**  
**ALL MODELS OF DELCO BATTERIES**

---

**HCC:**

**NRC/State License Number:**

**Net Property Weight for Ammo:**

**Boiling Point:** Boiling Point Text: 451F,233C

**Melting/Freezing Point:** Melting/Freezing Text: N/K

**Decomposition Point:** Decomposition Text: N/K

**Vapor Pressure:** 2.73 @ 25C Vapor Density: N/A

**Percent Volatile Organic Content:**

**Specific Gravity:** SUPP DATA

**Volatile Organic Content Pounds per Gallon:**

**pH:** <1

**Volatile Organic Content Grams per Liter:**

**Viscosity:** N/P

**Evaporation Weight and Reference:** NOT APPLICABLE

**Solubility in Water:** MISCIBLE

**Appearance and Odor:** LIQUID, SOLID.

**Percent Volatiles by Volume:** N/A

**Corrosion Rate:** N/K

---

**Section 10 - Stability & Reactivity Data**  
**ALL MODELS OF DELCO BATTERIES**

---

**Stability Indicator:** YES

**Materials to Avoid:**

STRONG REDUCING MATERIALS.

**Stability Condition to Avoid:**

NONE SPECIFIED BY MANUFACTURER.

**Hazardous Decomposition Products:**

WHEN HEATED, CAN EMIT HIGHLY TOXIC FUMES.

**Hazardous Polymerization Indicator:** NO

**Conditions to Avoid Polymerization:**

NOT RELEVANT

---

**Section 11 - Toxicological Information**  
**ALL MODELS OF DELCO BATTERIES**

---

**Toxicological Information:**

N/P

---

**Section 12 - Ecological Information**  
**ALL MODELS OF DELCO BATTERIES**

---

**Ecological Information:**

N/P

---

**Section 13 - Disposal Considerations**  
**ALL MODELS OF DELCO BATTERIES**

---

**Waste Disposal Methods:**

DISPOSE OF ACCORDING TO LOCAL, STATE & FEDERAL REGULATIONS FOR LEAD SCRAP OR ACID. RCRA HAZARDOUS WASTE #:D002.

---

**Section 14 - MSDS Transport Information**  
**ALL MODELS OF DELCO BATTERIES**

---

**Transport Information:**

N/P

---

**Section 15 - Regulatory Information**  
**ALL MODELS OF DELCO BATTERIES**

---

**SARA Title III Information:**

N/P

**Federal Regulatory Information:**

N/P

**State Regulatory Information:**

N/P

---

**Section 16 - Other Information**  
**ALL MODELS OF DELCO BATTERIES**

---

**Other Information:**

N/P

**HMIS Transportation Information**

**Product Identification:** ALL MODELS OF DELCO BATTERIES

**Transportation ID Number:** 128745

**Responsible Party CAGE:** NO488

**Date MSDS Prepared:** 06/04/1994

**Date MSDS Reviewed:** 10/22/1997

**MFN:** 10/22/1997

**Submitter:** N TN

**Status Code:** C

**Container Information**

**Unit of Issue:**

**Container Quantity:**

**Type of Container:**

**Net Unit Weight:**

**Article without MSDS:** N

**Technical Entry NOS Shipping Number:**

**Radioactivity:**

**Form:**

**Net Explosive Weight:**

**Coast Guard Ammunition Code:**

**Magnetism:** N/P

**AF MMAC Code:**

**DOD Exemption Number:**

**Limited Quantity Indicator:**

**Multiple Kit Number:** 0

**Kit Indicator:** N

**Kit Part Indicator:** N

**Review Indicator:** Y

**Additional Data:**

**Department of Transportation Information**

**DOT Proper Shipping Name:** BATTERIES, WET, FILLED WITH ACID

**DOT PSN Code:** BQN

**Symbols:**

**DOT PSN Modifier:** ELECTRIC STORAGE

**Hazard Class:** 8

**UN ID Number:** UN2794

**DOT Packaging Group:** III

**Label:** CORROSIVE

**Special Provision(s):**

**Packaging Exception:**

**Non Bulk Packaging:** 159

**Bulk Packaging:** 159

**Maximum Quantity in Passenger Area:** 30 KG GRO

**Maximum Quantity in Cargo Area:** NO LIMIT

**Stow in Vessel Requirements: A**  
**Requirements Water/Sp/Other:**

**IMO Detail Information**

**IMO Proper Shipping Name:** BATTERIES, WET, FILLED WITH ACID  
**IMO PSN Code:** BWD  
**IMO PSN Modifier:** ELECTRIC STORAGE  
**IMDG Page Number:** 8120  
**UN Number:** 2794  
**UN Hazard Class:** 8  
**IMO Packaging Group:** III  
**Subsidiary Risk Label:** -  
**EMS Number:** 8-10  
**Medical First Aid Guide Number:** 700

**IATA Detail Information**

**IATA Proper Shipping Name:** BATTERIES, WET, FILLED WITH ACID,  
**IATA PSN Code:** CZM  
**IATA PSN Modifier:** ELECTRIC STORAGE +  
**IATA UN Id Number:** 2794  
**IATA UN Class:** 8  
**Subsidiary Risk Class:**  
**UN Packaging Group:** III  
**IATA Label:** CORROSIVE  
**Packaging Note for Passengers:** 800  
**Maximum Quantity for Passengers:** NO LIMIT  
**Packaging Note for Cargo:** 800  
**Maximum Quantity for Cargo:** NO LIMIT  
**Exceptions:** A51

**AFI Detail Information**

**AFI Proper Shipping Name:** BATTERIES, WET, FILLED WITH ACID  
**AFI Symbols:**  
**AFI PSN Code:** CZM  
**AFI PSN Modifier:** ,ELECTRIC STORAGE  
**AFI UN Id Number:** UN2794  
**AFI Hazard Class:** 8  
**AFI Packing Group:** III  
**AFI Label:**  
**Special Provisions:** P5  
**Back Pack Reference:** A12.5

**HAZCOM Label Information**

**Product Identification:** ALL MODELS OF DELCO BATTERIES  
**CAGE:** NO488  
**Assigned Individual:** Y  
**Company Name:** DELCO REMY DIVISION GMC  
**Company PO Box:**  
**Company Street Address1:** 2401 COLUMBUS AVE  
**Company Street Address2:** ANDERSON, IN 46018 US  
**Health Emergency Telephone:** 317-646-7800  
**Label Required Indicator:** Y  
**Date Label Reviewed:** 08/28/1997  
**Status Code:** C  
**Manufacturer's Label Number:**  
**Date of Label:** 08/28/1997

**Year Procured:** N/K  
**Organization Code:** G  
**Chronic Hazard Indicator:** Y  
**Eye Protection Indicator:** YES  
**Skin Protection Indicator:** YES  
**Respiratory Protection Indicator:** YES  
**Signal Word:** WARNING  
**Health Hazard:** Moderate  
**Contact Hazard:** Moderate  
**Fire Hazard:** None  
**Reactivity Hazard:** None

---

8/8/2002 6:34:17 AM